



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/055,984	04/07/98	KIM	T K-018

WM02/1106
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EXAMINER	
NGUYEN, T	
ART UNIT	PAPER NUMBER
2663	7
DATE MAILED: 11/06/01	

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/055,984

Applicant(s)
Tae Woon KIM

Examiner
Toan Nguyen

Art Unit
2663



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Aug 22, 2001

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-37 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-6, 9, 10, 13, 14, 16, 17, 21, 22, 27-32, and 35 is/are rejected.

7) ☒ Claim(s) 7, 8, 11, 12, 15, 18-20, 23-26, 33, 34, 36, and 37 is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some* c) ☐ None of:

- 1) ☒ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

Application/Control Number: 09/055,984

Art Unit: 2663

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 2-3, 10, 13, 16, 28, 31 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2 lines 7, 10 and 15, "the output signal" has no antecedent basis. Similar problem exists in claim 31 line 6,

In claim 3 line 2, it is unclear as to what is meant by "mobile station comprises a data terminal coupled to a mobile terminal which are connected to each other or a separate mobile terminal".

In claim 10 lines 7, 9, 11 and 16, "the mobile data network interworking unit" has no antecedent basis. Similar problem exists in claim 16 line 4; claim 31 line 10; claim 35 lines 5, 6, 11 and 14.

In claim 13 line 3, "the service option" has no antecedent basis.

In claim 28 line 7, "modems" should be ---modem---.

In claim 35 line 3, "said mobile data network interworking unit" does not have a clear antecedent basis because it can not be determined which "said mobile data network interworking unit" applicant is referring to.

In claim 35 line 6, “the first party mobile station” renders the claim vague since its exact meaning is ambiguous.

In claim 35 line 9, “the first data path” has no antecedent basis.

In claim 35 line 12, “the second data path” has no antecedent basis.

Claims 11-20 and 36-37 are rejected since they are dependent from base claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 10, 13-14, 16-17, 21-22 and 35 are rejected under U.S.C. 102(b) as being anticipated by Essigmann (U.S. Patent 5,850,391).

For claims 10, 13-14, 16-17, 21-22 and 35, Essigmann discloses the steps of:

inputting an identification number of a called party mobile station (col. 7 lines 59-64);

establishing a first call from a calling party mobile station to said mobile data network interworking unit and then establishing a first traffic channel (col. 7 lines 14-29);

calling a called party mobile station at said mobile data network interworking unit (col. 7 lines 64 to col. 8 line 3);

establishing a second call from said called party mobile station to said mobile data network

interworking unit when a data response comes from said called party mobile station and then establishing a second traffic channel after said mobile data path connection module informs said public network data path connection control module of the normal state of said first data path (col. 8 lines 15-23);

establishing a call between said mobile switching center and the mobile data network interworking unit through the second data path (col. 8 lines 21-25); and

connecting said first and second traffic channels through at least one modems (col. 8 line 25).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-6, 9 and 27-32 are rejected under 35 U.S.C. 103(b) as being unpatentable over Essigmann (U.S. Patent 5,850,391) in view of Bolliger et al (U.S. Patent 5,195,090).

For claims 1, 3 and 27, Essigmann discloses shared interworking function within a mobile telecommunications network, comprising:

a plurality of base stations and base station controllers for transferring a signal transmitted from said mobile stations and signal transmitted to said mobile stations in a predetermined service area (see figure 1, col. 3 lines 35-38);

mobile switching center for detecting a service option included in the signal transmitted from the base stations and base station controllers and for executing a circuit data service or a packet data service according to the detected service option (col. 1 lines 13-30);

at least one mobile data network interworking unit for establishing a traffic channel of a mobile data path and a call between a calling party mobile station and a called party mobile station when said mobile switching center performs the circuit data service (see figure 3, col. 5 lines 21-23). Essigmann do not disclose a plurality of mobile stations. Bolliger et al from the same or similar field of endeavor teach a plurality of mobile stations (see figure 1, col. 7 lines 19-21). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the combined wireless access telephone-to telephone network interface architecture as taught by Bolliger et al in shared interworking function within a mobile telecommunications network of Essigmann. The motivation for using the combined wireless access telephone-to telephone network interface architecture as taught by Bolliger et al in shared interworking function within a mobile telecommunications network of Essigmann being that the system provides a plurality of geographically-dispersed service nodes known as cell sites (see figure 1, col. 7 lines 17-18).

For claims 2 and 31, Bolliger et al disclose mobile switching center comprises:

a mobile connection control module for detecting a service option include in the signal transmitted from base station and base station controllers and for generating a switching signal controlling an interface connection (see figure 1, col. 7 lines 28-33);

a mobile data path connection control module for controlling the connection to a mobile network data path according to the output signal of said mobile connection control module (col. 7 lines 33-34);

a public network data path connection control module for controlling the connection to a public network data path according to the output signal of said mobile data network interworking unit (col. 7 lines 33-34);

a trunk connection control module for transmitting an output signal of said public network data path connection control module or said mobile network data path connection control module to a public switched telephone network or to a second mobile switching center according to the output signal mobile data path control module or said public network data path connection control module (col. 7 lines 33-34).

For claim 4, Essigmann discloses data terminal includes one of notebook, personal digital assistant, laptop, palm top, portable or small computer (col. 1 lines 53-54).

For claim 5, Bolliger et al disclose each of said mobile stations includes a protocol stack for a circuit data and a call processing module for processing a packet data (col. 7 line 55 to col. 8 line 2).

For claims 6, 28-29 and 32, Essigmann discloses mobile data network interworking unit includes:

a data path connection section for forming a path connection between said mobile switching center and mobile data network interworking unit (see figure 5, col. 7 lines 50-51);

a main processing section forming a traffic channel of a mobile data path between a calling party mobile station and a called party mobile station to execute a circuit data communication or a packet data communication according to a received signal from said data path connection section (col. 7 lines 52-54);

a circuit data processing section analyzing the signal transmitted from said calling party mobile station if the protocol between the calling party mobile station and the called party mobile station is normally executed when said main processing section performs the circuit data service and then transmitting said called party identification number to said main processing section (col. 7 line 64 to col. 8 line 1); and

a switching section selectively switching the connection between said circuit data processing section and said data path connection section according to the control signal of said main processing (col. 7 lines 55-59). In claim 28, Essigmann discloses further one modem (col. 6 line 27).

For claims 9 and 30, Essigmann discloses a CDMA mobile data communication system (col. 4 line 40).

Objection To Claims, Allowable Subject Matter

6. Claims 7-8, 11-12, 15, 18-20, 23-26, 33-34, and 36-37 are objected to as being dependent upon a rejected base claims, but would be allowable if rewritten in independent form including all

of the limitations of the base claims and any intervening claims.

Response To Argument

7. Applicant's argument filed on August 22, 2001 have been fully considered, but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,850,391 to Essigmann, discloses Shared Interworking Function Within A mobile Telecommunications Network.

U.S. Patent 5,195,090 to Bolliger et al, discloses Wireless Access Telephone-To-Telephone Network Interface Architecture.

Contact Information

9. Any response to this action should be mailed to:

Assistant Commissioner for Patents
Washington, D.C. 20231

10. Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

11. Any inquiry concerning this communication or early communications should be directed to Toan Nguyen whose telephone number is (703) 305-0140. He can be reached Monday through Friday from 7:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached at (703) 308-5340. The fax phone number for this Group is (703)-872-9314.

Any inquiry of a general nature or relating to the status of this application should be direct to the Group receptionist whose telephone number is (703) 305-9600.

TN

T.N.



DANG TON
PRIMARY EXAMINER